Superwriter™ 924

A printer interface for the Laser,® Apple,® and Macintosh® computers emulating 9 and 24 pin Imagewriter® printers using popular parallel printers.

Instruction Manual

This equipment generates and uses radio frequency energy and if not installed and used properly, that is, in strict accordance with the manufacturer's instructions, may cause interference to radio and television reception. It has been type tested and found to comply with the limits of a Class B computing device in accordance with the specifications in Sub-part J of Part 15 FCC Rules, which are designed to provide reasonable protection against such interference in a residential installation. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause interference to radio and television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient the receiving antenna
- Relocate the computer with respect to the receiver
- Move the computer away from the receiver
- Plug the computer into a different outlet so that the computer and receiver are on different branch circuits

If necessary, the user should consult the dealer or an experienced technician for additional suggestions. The user may find the following booklet prepared by the Federal Communications Commission helpful: "How to Identify and Resolve Radio-TV Interference Problems." This booklet is available from the U.S. Government Printing Office, Washington, D.C., 20402. Stock No. 004-000-00345-4.

Superwriter 924™Owner's Manual
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Xetec, Inc
2804 Arnold Rd.
Salina, Ks. 67401
(913) 827-0685

LIMITED WARRANTY

Xetec, Inc. warrants the ***Superwriter 924*** to be in good working order for a period of one year from the date of purchase from Xetec, Inc. or an authorized dealer. Should this product fail to be in good working order at any time during this warranty period, Xetec, Inc. will, at its option, repair or replace this product at no additional charge except as set forth below. Repair parts and replacement products will be furnished on an exchange basis and will be either reconditioned or new. All replaced parts and products become the property of Xetec, Inc. This limited warranty does not include service to repair damage to the product resulting from accident, disaster, abuse, or non-Xetec modification of the product.

Limited warranty service may be obtained by delivering the product during the warranty period to an authorized Xetec dealer or to Xetec, Inc., and by providing proof of purchase date. Warranty will be valid for registered owner's only. If this product is delivered by mail, you agree to insure the product or assume the risk of loss or damage in transit, to prepay shipping charges to Xetec, Inc., and to use the original shipping container or equivalent. Contact Xetec, Inc., 2804 Arnold Rd., Salina, Ks. 67401, (913) 827-0685 for further information.

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If this product is not in good working order as warranted above, your sole remedy shall be repair or replacement as provided above. In no event will Xetec, Inc. be liable to you for any damages including any lost profits, lost savings or other incidental or consequential damages arising out of the use of, or inability to use such product, even if Xetec or an authorized dealer has been advised of the possibility of such damages, or for any claim by any other party.

Some states do not allow the exclusion or limitation of incidental or consequential damages for consumer products, so the above limitations may not apply to you.

This warranty gives you specific legal rights, and you may also have other rights which may vary from state to state.

INTRODUCTION

The Xetec *Superwriter 924* is an interface that allows a variety of non-Imagewriter parallel printers to be attached to Apple, Macintosh, and Laser computers. The two major functions the interface performs are

a) Converting your computer's serial data to parallel format
b) Translating Imagewriter codes to those for your printer

This manual will help you get your interface connected and working properly. The remainder of the manual will then be devoted to setting the switches appropriately for different software.

INSTALLATION

The *Superwriter 924* is simple to hook up. Make sure your computer and printer are both shut off. Plug the 36-pin Centronics data cable coming out of the interface into the connector on the back of your printer. Make sure it is pushed in all the way. If your printer has clips on the sides of the connector, lock these into place around the interface cable to keep it from coming loose.

Next, plug the interface's 8-pin mini DIN cable into your computer. For Macintosh and IIGS computers, plug the mini DIN cable into the port in the back of your computer labeled with a printer icon. For IIc and Laser computers, plug the mini DIN cable into the provided adaptor cable. Plug the other end of this adaptor into your computer (look for the printer symbol). For older models of Macintosh computers (the 128, 512, and 512KE), a DE-9 adaptor cable is required. Contact Xetec for availablility.

Next, insert the plug from the wall adaptor into the power jack on your *Superwriter 924*. Then plug the adaptor into a wall socket (120VAC).

SETTING THE SWITCHES

Your interface has many features and options, so eight dip switches have been included to let you make your choices. These switches are important because if not set correctly, your interface may do things you are not expecting.

The DIP switches are *active*, which means that they can be changed at any time to alter the interface's operation.

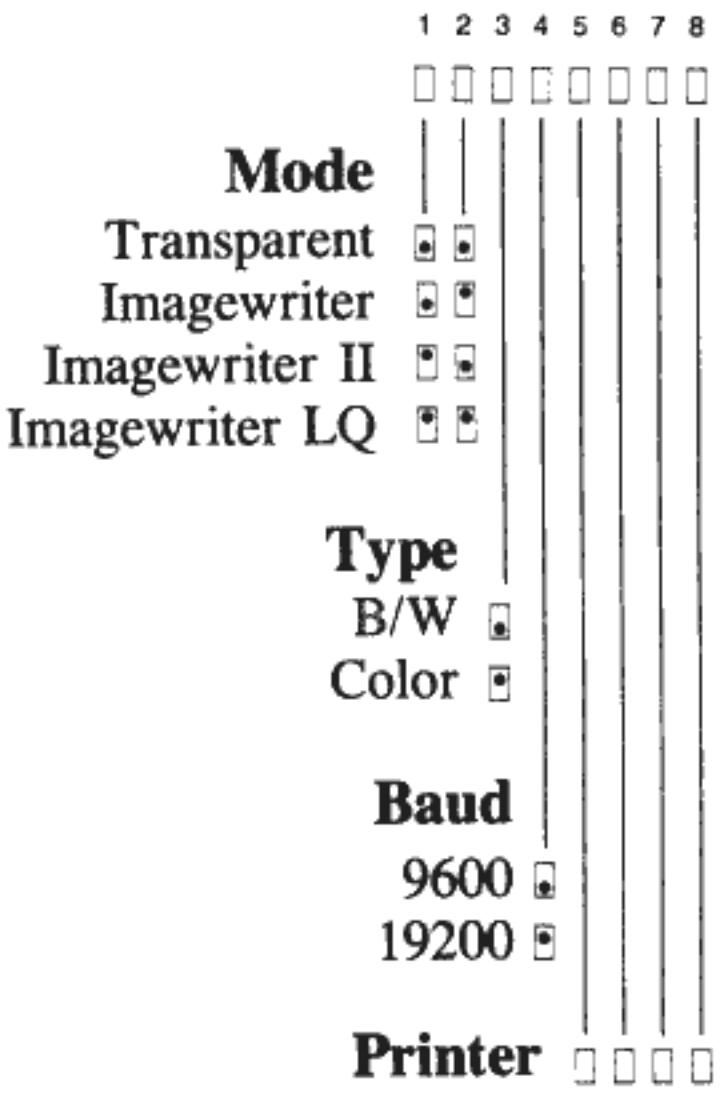
Throughout this manual, you will be instructed to set your interface switches in certain ways to get different features. Instead of just saying 'turn switch 4 on', a diagram like the one below will be given to help make it clearer.

Note: Always push the end of the switch marked with a black dot. Any of the switches left blank do not apply in that example and should be left alone.

Here's a brief summary of the switch functions. Following is a detailed description of each:

DIP SWITCH FUNCTIONS

Superwriter 924
Switch Function Summary



The Printer Selection Switches (5-8)

Let's set these four switches first because once you get them right, you won't need to worry about them again. Basically, the purpose of these switches is to let your interface know what printer is attached to it. **This is vital when using ImageWriter emulation modes.**

Find your printer in the following list and set switches 5-8 as shown. If your printer is not listed, try one of the 'Epson' settings first since they are the most common. If that doesn't work, start trying others or contact your printer manufacturer for compatibility information.

Printer	1 2 3 4 5 6 7 8
Blue Chip	▯▯▯▯●●●●
C-Itoh 8510	▯▯▯▯●●●●
C-Itoh 8510S	▯▯▯▯●●●●
C.Itoh ProWriter JR plus	▯▯▯▯●●●●
Epson MX	▯▯▯▯●●●●
Epson RX	▯▯▯▯●●●●
Epson FX	▯▯▯▯●●●●
Epson JX	▯▯▯▯●●●●
Epson LQ-1500	▯▯▯▯●●●●
IBM Graphics	▯▯▯▯●●●●
NEC 8023	▯▯▯▯●●●●
Okidata 192	▯▯▯▯●●●●
Okidata 292	▯▯▯▯●●●●
Panasonic KXP series	▯▯▯▯●●●●
ProWriter	▯▯▯▯●●●●
Star (most)	▯▯▯▯●●●●
Star NB24-10/15	▯▯▯▯●●●●
Star NX-1000	▯▯▯▯●●●●
Star NX-1000R	▯▯▯▯●●●●
Star XB-2410/2415	▯▯▯▯●●●●
Star XR-1000/1500	▯▯▯▯●●●●

Type (switch 3)

This switch is also set according to the printer attached. It tells the interface whether your printer has the ability to print colors or not. (This effectively doubles the number of printers supported.) This switch turns the emulation of ImageWriter color codes on and off, so if you have a color printer but are using a black-only ribbon, set this switch to black-and-white (B/W).

Also, when the interface is set to the transparent mode (via switches 1 and 2), this switch selects whether to pass 7-bit or 8-bit data. See ''Using Packaged Software''.

Mode (switches 1 & 2)

These two switches select the operating mode of the interface. Four modes are provided:

	1 2 3 4 5 6 7 8
Transparent	
Imagewriter	
Imagewriter II	
Imagewriter LQ	

The transparent mode simply converts codes from serial to parallel. The other three modes cause the interface to emulate the different models of Imagewriter printers. Emulation means that the interface/printer combination acts like (responds to the same codes as) the Imagewriter printers.

Baud (switch 4)

This switch tells the interface the baud rate of the incoming serial data (from the computer).

	1 2 3 4 5 6 7 8
9600	
19200	

For proper emulation of Imagewriter printers, this switch should be set to 9600 for Imagewriters I and II, and 19200 for Imagewriter LQ's. You can deviate from these guidelines if you make special provisions for specifying a corresponding serial speed in your computer.

The interface expects the serial data to be in this format: 9600 or 19200 baud, 8 bits, 1 stop bit, no parity. If using the Apple IIc, set these parameters via the PIN assignment. For the IIGS, these parameters are selected from the Classic Desk Accessory menu. For Macintosh computers, simply use Chooser to select the ImageWriter driver to use. (Remember the above guidelines for setting the baud switch.)

USING PACKAGED SOFTWARE

There are two ways to use the *SuperWriter 924* interface with your present software. Normally, you should use one of the Imagewriter emulation modes and let the software think it's talking to an Imagewriter. With some software it may be more advantageous to select your printer from its menu of supported printers and set the interface to ''transparent'' mode. This can only be done if the software

directly supports your printer's codes (since in this case the *SuperWriter* isn't translating them for you).

Note: when the interface is set in the transparent mode (switches 1,2 off), the color/BW switch selects 7 or 8-bit transparency:

8 bit transparent

7 bit transparent

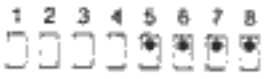
In the 7-bit transparent mode, the top bit is clipped off. This may be necessary when using AppleSoft BASIC or some older software that sets bit 7 of printed data.

SPECIAL MODES

Two special debugging modes are also supported by the *SuperWriter 924*. The first is useful for ROM revision identification and for doublechecking the printer selection switches:

When this mode is set and the interface is turned on (or reset), some identification information is printed as well as the current printer setting.

The second mode is useful for programmers writing software to produce Imagewriter-compatible output:



Note that this is a special printer setting that will require changing of the printer switches. In this configuration, the interface will print in English the Imagewriter code sequences sent to it. This mode can also be used for locating troublesome (improperly emulated) codes from purchased software.

RESET BUTTON

This button, accessible through the interface cover, can be used at any time to interrupt the interface and set it back to an orderly state. Realize, however, that this does not interrupt software in the computer from trying to print. If it isn't aborted separately, it will resume printing after the interface is reset.

PRINTER CONNECTOR PINOUT

PIN #	SIGNAL
1	Strobe
2	Data bit 1
3	Data bit 2
4	Data bit 3
5	Data bit 4
6	Data bit 5
7	Data bit 6
8	Data bit 7
9	Data bit 8
11	Busy
16	Ground
31	Input Prime

SuperWriter 924 Addendum

On page 3, please add the following to the **Printer** list for switch selections:

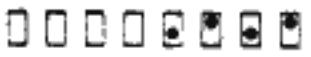
Fujitsu DL series (color only)	
Fujitsu DL series (without color)	
Fujitsu DX series	
Panasonic KXP 1124, 1524, 1624	
Panasonic KXP 1180, 1191, 1192	
Panasonic KXP 1080, 1091, 1092	
Star (old)	
Star XR-1000/1500	

and **delete** the following from the list:

Panasonic KXP series
Star (most)
Star XR-1000/1500

On Page 4 under **"Mode (switches 1 & 2)"**

The interface's Imagewriter LQ emulation mode can only be used when attached to a 24-wire printer. Currently, the only 24-wire printer setting is



When using any other printer settings, the interface will default to Imagewriter II emulation if the switches are set for the LQ mode.

Apple II GS users should set handshaking as follows:

DCD - No
DSR/DTR - Yes
xon/xoff - No

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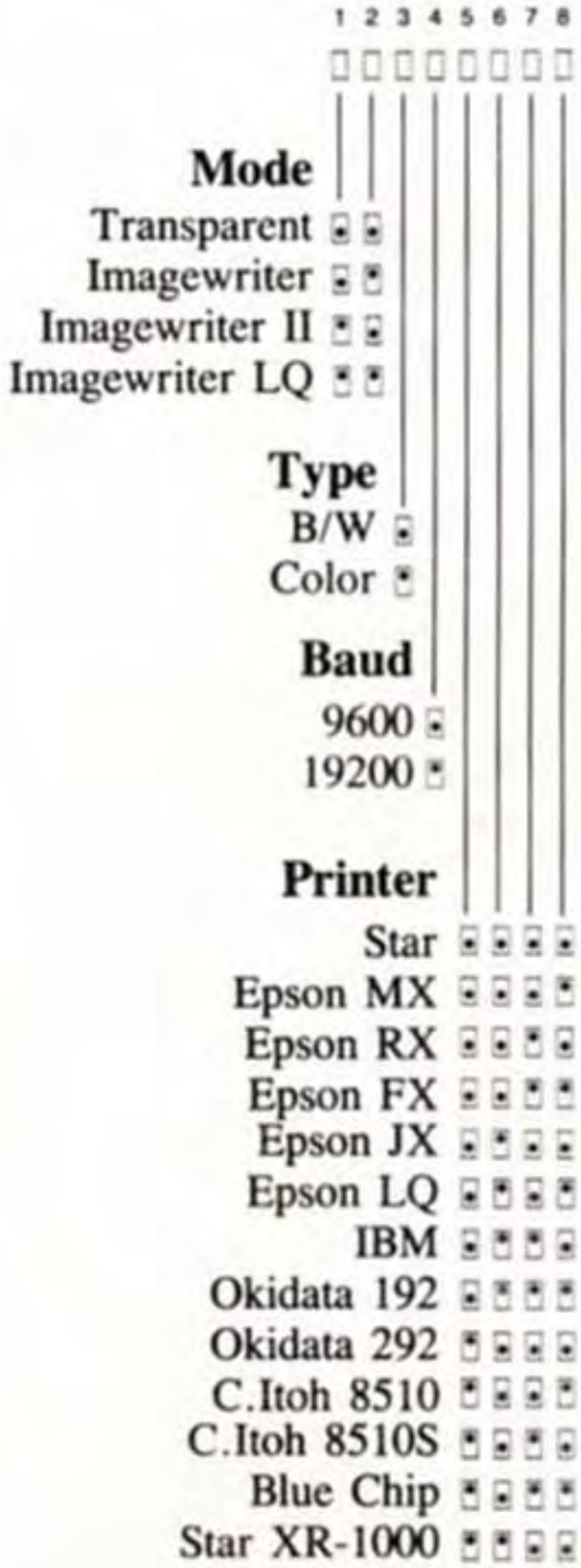
Superwriter 924

Switch Function Summary



← PUSH